

CLAIMS

1. A powder coating system for coating an article to be coated, which is carried along a carrying path and is placed within a coating booth, comprising:

a pair of divided booths arranged on both sides of the carrying path to be each movable between a coating position close to the carrying path and a cleaning position retracted from the carrying path, respective sides of the divided booths opposed to the carrying path having openings which are close to each other when at the coating positions to form a coating booth surrounding the article to be coated; and

closing means for covering the openings of the divided booths retracted to the cleaning positions,

wherein an interior of each of the divided booths is cleaned with the opening of the divided booth at the cleaning position being covered with the closing means.

2. A powder coating system according to Claim 1 wherein the plurality of pairs of divided booths are arranged in series along the carrying path.

3. A powder coating system according to Claim 1 wherein the closing means comprises a pair of cleaning booths arranged to be each movable between an operating position where each of the pair of cleaning booths covers the opening of the divided booth retracted to the cleaning position and a retracted position where each of the pair of cleaning booths does not interfere with movement paths for the divided booths.

4. A powder coating system according to Claim 3 wherein the pair of cleaning booths are integrated with each other.

5. A powder coating system according to Claim 3 wherein a common cleaning booth is arranged for a plurality of divided booths.

6. A powder coating system according to Claim 3 wherein while coating is being performed by a first pair of divided booths forming a coating booth, a second pair of divided booths are moved to the cleaning positions, and at the same time, the cleaning booths are moved to the operating positions to clean the second pair of divided booths.

7. A powder coating system according to Claim 1 wherein most of the openings of the divided booths are covered with the closing means while leaving opening slits, and air inside the divided booths are sucked so that outside air is taken into the divided booths from the opening slits to remove powder coating material adhering to inner wall surfaces of the divided booths.

8. A powder coating system according to Claim 1 wherein a cyclone is connected to the coating booth.

9. A powder coating system according to Claim 8 wherein the one cyclone is connected to a pair of divided booths.

10. A powder coating system according to Claim 1 wherein each of the divided booths is equipped with a blowoff device for blowing compressed air against the inner wall surface and a floor surface of the divided booth to remove powder coating material therefrom.

11. A powder coating system according to Claim 1 further comprising a reciprocator to which a coating gun for performing coating on

the article to be coated placed within the coating booth is mounted.

12. A powder coating system according to Claim 11 further comprising a blowoff device for blowing compressed air against an outer surface of the coating gun to remove powder coating material from the outer surface of the coating gun.